## BEST AVAILABLE COPY PATENT ABSTRACTS OF JAPAN

(11)Publication number:

04-066491

(43)Date of publication of application: 02.03.1992

(51)Int.CI.

B66B 9/02 B66B 5/06

B66B 5/18

(21)Application number: 02-179461

(71)Applicant: MITSUBISHI ELECTRIC CORP

(22)Date of filing:

09.07.1990

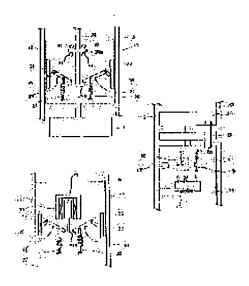
(72)Inventor: NOMURA MASAMI

## (54) ROPELESS LINEAR MOTOR ELEVATOR

## (57)Abstract:

PURPOSE: To instantly stop a cage in the case that the motive force is abnormally reduced by detecting the acceleration of the cage with an accelerometer and monitoring the cage with a monitoring part, and also operating a braking device when the acceleration is larger than the specified value.

CONSTITUTION: A cage 11 is stopped by the frictional force caused between respective shoes 25, 26, 35 and 36, and respective rails 12 by means of energizing force of a spring. Meanwhile, the cage 11 is operated such that a motive body 14 moves a first brake device 13 and an operating lever 29 upwardly through motive force, thus releasing the braking. After that, the motive force is increased and the plunger is moved upwardly, thus releasing the braking of a second brake device 15. In elevation of the cage 11, when the motive force is abnormally reduced, and the output voltage from an accelerometer 17 of the cage 11 exceeds the specified value Va, no signal is outputted from a comparator 18



thereby applying no current to a transister 19. Thus, a relay contact B1 is released by a relay coil B. Therefore, the current-carrying for an electromagnetic coil 16 is stopped, thereby stopping the case 11 by the brake device 15 with safety. Furthermore, the power supply of the motive body 14 is cut-off by the relay contact B2.

## **LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision

of rejection]
[Date of requesting appeal against examiner's decision of rejection]
[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office